

**TRANSLATION****PATENT COOPERATION TREATY****PCT****INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>COT8781</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/CA2004/002217</b>	International filing date ( <i>day/month/year</i> ) <b>06.12.2004</b>	Priority date ( <i>day/month/year</i> ) <b>10.02.2004</b>
International Patent Classification (IPC) or national classification and IPC <b>H04S 3/00 (2006.01)</b>		
Applicant <b>CÔTÉ, Richard</b>		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2.	This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.	
3.	This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> ( <i>sent to the applicant and to the International Bureau</i> ) a total of <u>7</u> sheets, as follows: <div style="margin-left: 20px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</div> b. <input type="checkbox"/> ( <i>sent to the International Bureau only</i> ) a total of (indicate type and number of electronic carrier(s)) <div style="margin-left: 20px;">_____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</div>	
4.	This report contains indications relating to the following items: <div style="margin-left: 20px;"><input checked="" type="checkbox"/> Box No. I      Basis of the report <input type="checkbox"/> Box No. II      Priority <input type="checkbox"/> Box No. III      Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV      Lack of unity of invention <input checked="" type="checkbox"/> Box No. V      Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI      Certain documents cited <input type="checkbox"/> Box No. VII      Certain defects in the international application <input checked="" type="checkbox"/> Box No. VIII      Certain observations on the international application</div>	

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/CA	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/CA2004/002217

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1, 3-14 as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* 2 received by this Authority on 12.12.2005
- ☒ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 15, 17-20 received by this Authority on 12.12.2005
- nos.\* 16 received by this Authority on 09.06.2006
- ☒ the drawings:
- sheets 1-7 as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/CA2004/002217

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1.	Statement		
	Novelty (N)	Claims <u>1-28</u>	YES
		Claims <u>None</u>	NO
	Inventive step (IS)	Claims <u>1-28</u>	YES
		Claims <u>None</u>	NO
	Industrial applicability (IA)	Claims <u>1-28</u>	YES
		Claims <u>None</u>	NO
2.	Citations and explanations (Rule 70.7)		
	<p>The present report mentions the following document, which is cited in the international search report and considered to be the document closest to the present application:</p> <p style="padding-left: 40px;">D1: US 5 319 713 (Waller, Jr. et al.) 7 June 1994</p> <p>The present application meets the requirements of PCT Article 33(2) and (3), since the subject matter of claims 1 to 28 is considered novel and inventive.</p> <p>D1 describes a sound system for generating, from two stereo channel signals, at least two new signals from which the common portions of the two stereo signals are removed. The common portions are removed by taking the difference between a left-hand signal and a right-hand signal and dividing this difference into a plurality of bands (see D1, column 3, lines 57 to 61).</p> <p>The present application, as defined by claims 1, 3 (once modified, see Box VIII, section 2(3)) 14 and 22, differs from D1 in the fact that it adds a device (and a method) capable of creating secondary signals from the primary signals in a novel and inventive manner. This is achieved by identifying a common portion between two primary signals and then subtracting this common portion from the left-hand signal and</p>		

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>from the right-hand signal so as to create two secondary signals from which the common portion is removed, thereby creating two secondary left-hand and right-hand signals that differ from each other and from the two primary signals. This enables the stereophony to be enhanced when the secondary signals activate loudspeakers.</p> <p>The subject matter of claims 1, 3, 14 and 22 therefore meets the requirements of novelty and inventive step (PCT Article 33(2) and (3)), since no document cited in the international search report either discloses or suggests a device (and a method) for converting two stereo signals into a plurality of other signals that differ from one another, as defined in said claims.</p> <p>Claims 2, 4 to 13, 15 to 21 and 23 to 28 also meet the requirements of novelty and inventive step (PCT Article 33(2) and (3)), since they are dependent on claims 1, 3, 14 and 22, respectively.</p> <p>The subject matter of claims 1 to 28 is considered industrially applicable and therefore meets the requirements of PCT Article 33(4).</p>

**Box No. VIII** Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The following claims are not clear and concise (PCT Article 6) for the following reasons:

1. Claim 1

The expression "said signals" has a plurality of possible referents. This expression should be replaced by "said different signals", so as to differentiate it from the primary signals mentioned in the first line of the claim.

2. Claim 3

- (1) This claim starts with the expression "Un dispositif permettant" (a device for...) without subsequently adding a transitional expression or letter such as "de";
- (2) The expression "the signals" has a plurality of possible referents. The applicant should specify clearly the signals concerned;
- (3) To be consistent with the description, this claim should specify that the signals that constitute the pair of signals defining the secondary stereo source differ from one another and from the two signals that constitute the pair of signals defining the primary stereo source (see page 7, line 23 to page 8, line 2).

3. Claims 6 to 9

Said claims refer to the "devices of claims 1 or 3" without specifying clearly which device is concerned. The same observation applies to claims 12 and 13.

Box No. VIII	Certain observations on the international application
4.	<p>Claims 6 and 8</p> <p>The feature "used in post-amplification mode" is not described in the description and should therefore be omitted.</p> <p>5. Claims 6 to 9</p> <p>When said claims are dependent on claim 3, the expression "said primary and secondary signals" has no referent. A similar observation applies to claims 12 and 13.</p> <p>6. Claim 14</p> <p>The use of the expressions "such as, for example" (line 8) and "such as" (line 11) is a source of ambiguity. Said expressions cast doubt on the presence of the particular definitions to which they refer.</p> <p>7. Claim 21</p> <p>The letter "s" in the expression "est opposés" should be omitted.</p> <p>In claim 1, the reference signs (30) and (32) are used to designate, on the one hand, the left-hand and right-hand signals (in line 6) and, on the other hand, two outputs (line 12). This does not meet the requirements of PCT Rule 11.13(m), according to which the same feature shall be denoted by the same reference sign throughout the application.</p> <p>Contrary to the requirement of PCT Rule 5.1(a)(iv), the description does not describe what figure 4 represents. Figure 4 is a diagram representing a left-hand primary signal.</p>